

0-AUG-449 EMORY UNIV ATLANTA GA YERKES REGIONAL PRIMATE RESEA--ETC F/G 6/5
THE BEHAVIORAL AND BIOMEDICAL STUDY OF PYGMY CHIMPANZEES, (U)
FEB 76 G H BOURNE
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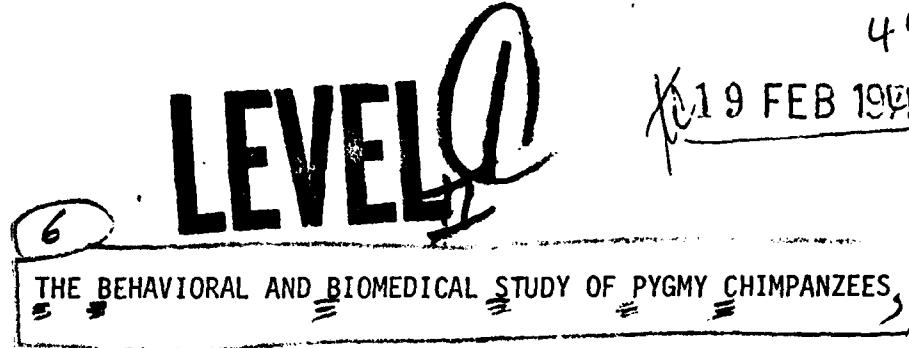
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PYGMY CHIMPANZEES

REPORT ON LABORATORY INVESTIGATIONS

Studies on blood chemistry and hematology show that the figures for pygmy chimpanzees in nearly every case fall within the normal human range.

When the pygmy chimpanzees first arrived their hemoglobins and hematocrits were low and each successive estimation showed improvement up to the present.

The following parasites were found on arrival:

- Strongyloides
- Enterobius
- Trichomonas
- Sucking Lice
- Microfilariae
- Cestodes
- Nematodes

Rectal, throat and stool cultures showed the presence of Herpes and pox viruses. TB tests carried out on arrival and at intervals thereafter remained ambiguous and this delayed for months the liberation of the animals from quarantine.

Of the five animals which arrived, two babies, Mukili and Maschini were in a very low state of health and finally refused to eat, forced feeding and finally intravenous feeding were used, but it was impossible to save these two animals.

The other three animals, the mature female, Lokalema, and the two pre-pubescent, Matata and Boksondo, have progressively improved in health and at the time of this writing are in good condition.

The weights of the five animals on arrival were:

Matata 9.5 kg.

Mukili 6.5 kg.

Lokalema 27.7 kg.

Boksondo 11.2 kg.

Maschini 7.0 kg.

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Studies have also been made on the general and sexual behavior of these animals and a paper concerning these results have been sent to "Science" for publication. A copy of the manuscript is attached.

Some preliminary studies have been started on the level of female sex and gonadotrophins in the blood and a full study of the hormonal levels in the various stages of the female sex cycle will begin shortly.

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BLOOD CHEMISTRY

<u>PYGMY CHIMPANZEES:</u>	<u>1 - Lokolema</u>	<u>2 - Matata</u>	<u>3 - Bosondjo</u>	<u>Human Values</u>
Cholesterol	202	182	195	150-270
Uric Acid	6.1	6.0	6.6	2.6
Total Protein	6.7	6.0	6.3	6.0-8.0
Albumin	4.5	4.0	4.1	3.5-5.6
Globulin	2.2	2.0	2.3	1.3-3.2
SGPT	14	16	18	5-35
SGOT	40	48	46	8-40
Alkaline Phosphatase	52	56	51	25-92
Total Bilirubin	1.4	1.3	1.6	0.2-1.0
Direct Bilirubin	0.6	0.5	0.5	0.0-0.2
LDH	362	373	354	100-350
CPK	278	274	276	10-100
TI (Total Iron)	282	284	285	50-180 mg/100 ml
TIBC (Total Iron Binding Capacity)	367	369	373	280-400 mg/100 ml
Ca.	9.0	8.7	8.9	9.5-11.5
Phosphatase	4.1	4.4	4.0	2.5-
Na.	133	131	138	138-146
K.	3.9	4.2	4.0	3.8-5.1
Cl.	99	98	98	95-106
GLU	106	101	95	80-120
Amylase	128	136	132	40-160
BUN	11	18	11	8.0-20.0
Creat.	0.9	0.8	0.9	0.8-1.3

HEMATOLOGYAll 5 pygmy chimpanzees - Blood Type A

	<u>Lokolema ♀</u>	<u>Matata ♀</u>	<u>Bosondjo ♂</u>	<u>Human Values</u>
RBC	5.78	5.65	4.38	4.5-5.5
WBC	12,900	13,000	20,400	6-10,000
Hcrt.	43	39	36	40-50 (males) 35-45 (females)
Hb.	13.9	13.0	12	14-16
Segs.	76%	75%	55%	66-75
Bands	2%	4%	2%	0.3%
Lymph.	18%	19%	38%	20-30
Eosin.	4%	2%	4%	2-3
Monos.				1-2
MCV	74-39	69-07	82-19	86 (80-100)
MCH	24-04	23-00	27-39	29 (27-32)
MCHC	32-32	33-33	33-32	34 (33-38)